Dr. Paul F. Glenn Hemphill, Noyes & Co. 8 Hanover Street New York 4, New York

Dear Dr. Glenn:

May I reply to your letter of July 9 in outline:

- 1. "Do you consider this a worthwhile project, or merely a waste of time?"
  Very worthwhile if carefully oriented.
- 2. "Do you feel that there is a surplus of a shortage of research funds available for such research?"
  - Mixed. Operating funds for short-term projects is fairly easy now. In urgent short supply for medical research generally are capital funds especially for building and equipment. Usual availability of 50:50 matching funds from NIH makes this even more tantalizing. It is also destructive when this support is too narrowly constructed: research is best forwarded by a broad line of attack, with specialists by discipline (e.g. physics, chemistry, morphology) rather than by problem area. We should not try to build walls between "aging" and mental retardation and "heart disease" and "cancer", but most philanthropic support is organized just that way.
- 3. "Can individuals not associated with an institution readily obtain such research funds, or are they available to scientists affiliated with institutions?"
  - Most of the competent workers (and even the ones with far-out ideas) are at universities and research foundations unless they have a special ax to grind.
- 4. "Are you acquainted with any specific projects in need of research funds

i about \$1 million minimum for research as the ultra-structure of cells and

Are you kidding? We desperately need facilities at Stanford in such areas tissues.

5. "Does it seem unreasonable to you to anticipate a significant advance toward our understanding of the causes of aging by 1970?"

Yes.

Sincerely yours,

Joshua Lederberg Professor of Genetics